	Application No.	Applicant(s)
Notice of Allowability	10/681,759	DELINE ET AL.
	Examiner	Art Unit
	Michael J. Yigdall	2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Applicant's reply filed on October 10, 2008*.

2. ☒ The allowed claim(s) is/are *1-20 and 22-24 (renumbered 1-23)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20081205* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Michael J. Yigdall/
Examiner, Art Unit 2192

DETAILED ACTION

1.   This Office action is responsive to Applicant's reply filed on October 10, 2008. Claims

1-20 and 22-24 are pending.

Response to Amendment

2.   The rejections of claims 1-20 and 22-24 under 35 U.S.C. § 103(a) have been withdrawn

in view of the amendments to the claims.

Response to Arguments

3.   Applicant's arguments filed on October 10, 2008 have been fully considered and are

persuasive in view of the amendments to the claims. The rejections of the claims have been

withdrawn as noted above.

Examiner's Amendment

4.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Ronald Krosky (Reg. No. 58,564) on December 2, 2008.

5.   The claims are amended, as presented below, to adopt the changes that Applicant's

representative provided to the examiner on December 2, 2008 (see the attached facsimile

transmission). The amendments to the claims address potential issues of non-statutory subject

matter under 35 U.S.C. § 101.

IN THE CLAIMS

Please amend claims 1, 15, 17, 19 and 22-24 as follows:

        1.   (Currently Amended) A computer implemented executable code check system

comprising:

        an input component that receives an object file and a specification associated with the

object file, the specification comprising information associated with a plug-in condition for a

method, the plug-in condition parses contents of a query string and makes the content available

to a checker as part of a program's approximate execution state, the plug-in condition includes a

rule for using an interface, system resource management, order of method calls and formatting of

string parameters; and,

the checker that employs the specification to facilitate static checking of the object file,

the checker passing a user injected custom state to the plug-in condition to check a fault

condition and providing information if the fault condition is determined,

wherein memory operatively coupled to a processor retains at least a portion of the input

component or the checker.

15.   (Currently Amended) A method of facilitating static checking of executable code

that is at least partially executed by a computer, comprising:

receiving executable code;

receiving a specification associated with the executable code, the specification

comprising information associated with at least one of a precondition or a postcondition for a

method, the at least one of a precondition or a postcondition parses contents of a query string and

makes the content available to a checker as part of a program's approximate execution state, the

at least one of a precondition or a postcondition includes one or more rules for using an interface,

system resource management, order of method calls and formatting of string parameters;

statically applying the specification to the executable code by passing a user injected

custom state to the at least one precondition or postcondition;

determining whether a fault condition exists based, at least in part, upon the statically

applied specification; and,

providing information associated with the fault condition, [[if]] when a fault condition is

determined to exist.

17.   (Currently Amended) A method of developing a software component that is at least partially executed by a computer, comprising:

implementing a subclass of a custom state class;

implementing at least one of a plug-in precondition or a plug-in postcondition as a method of the subclass, the at least one of a plug-in precondition or a plug-in postcondition parses contents of a query string and makes the content available to a checker as part of a program's approximate execution state, the at least one of a plug-in precondition or a plug-in postcondition includes at least one rule for using an interface, system resource management, order of method calls and formatting of string parameters;

placing a custom attribute on an enclosing type declaration that references the custom state subclass;

placing an attribute on a declaration that references the at least one of a plug-in precondition or a plug-in postcondition; and

determining a fault condition based in part upon [[the]] information from the at least one of plug-in precondition or a plug-in postcondition; and

providing information associated with the fault condition, when a fault condition is determined to exist.

19.   (Currently Amended) A method of performing static checking of executable code that is at least partially executed by a computer, comprising:

invoking a precondition plug-in that is arbitrary code written by a programmer, the

precondition plug-in includes one or more rules for using an interface, system resource

management, order of method calls and formatting of string parameters;

providing the precondition plug-in with a program execution state at the call to a method;

receiving information from the precondition plug-in, the precondition plug-in parses

contents of a query string and makes the content available to a checker as part of a program's

approximate execution state to enable the checker to find defects in the query;

determining whether a fault condition exists based, at least in part, upon the information

from the pre-condition plug-in;

providing information associated with the fault condition, [[if]] when a fault condition is

determined to exist; and

removing the precondition plug-in from the executable code to reduce the overall

physical storage requirements associated with the executable code.

22.   (Currently Amended) A computer readable medium storing computer executable

components of an executable code check system comprising:

an input component that receives an object file and a specification associated with the

object file, the specification comprising information associated with a plug-in condition for a

method, the plug-in condition parses contents of a query string and makes the content available

to a checker component as part of a program's approximate execution state and the plug-in

condition includes a rule for using an interface, system resource management, order of method

calls and formatting of string parameters; and,

the checker component that employs the specification to facilitate static checking of the

object file, the checker component passing a user injected custom state to the plug-in condition to

check a fault condition and providing information [[if]] when the fault condition is determined.

23.   (Currently Amended) A computer implemented executable code check system

comprising:

means for receiving a specification associated with an object file, the specification

comprising information associated with a plug-in condition for a method, the plug-in condition

parses contents of a query string and makes the content available to a checker as part of a

program's approximate execution state and includes one or more rules for using an interface,

system resource management, order of method calls and formatting of string parameters;

means for statically checking the object file based, at least in part, upon the specification;

means for passing a user injected custom state to the plug-in condition and determining

[[if]] when a fault condition exists; and,

means for providing information [[if]] when a fault condition is determined to exist,

wherein a processor operatively coupled to memory executes at least one instruction in

relation to at least one of the aforementioned means.

24.   (Currently Amended) A method that is at least partially executed by a computer,

of performing static checking of executable code, comprising:

receiving a request, the request including a parameter;

receiving a plug-in condition that parses contents of a query string and makes the content

available to a checker as part of a program's approximate execution state, the plug-in condition

includes one or more rules for using an interface, system resource management, order of method

calls and formatting of string parameters;

setting a type of a result of a method call to a type of the parameter;

employing the parameter only during static checking of the method; ~~and~~

performing component-wise comparison of a user injected custom state and a state

defined by the parameter to determine a fault condition;

providing information associated with the fault condition, when a fault condition is

determined to exist.

Allowable Subject Matter

6.   Claims 1-20 and 22-24 are allowed.

7.   The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or reasonably suggest, in the arrangements recited

in independent claims 1, 15, 17, 19 and 22-24, plug-in pre- or post-conditions that include rules

for using an interface, system resource management, order of method calls and formatting of

string parameters, and parse the contents of a query string for a checker to determine whether a

fault condition exists and provide information if the fault condition exists, such as reflected in

Applicant's arguments (see Applicant's remarks, pages 8-13).

8.   Any comments that Applicant considers necessary must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael J. Yigdall whose telephone number is 571-272-3707.

The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

                                        Michael J. Yigdall
                                        Examiner
                                        Art Unit 2192

/Michael J. Yigdall/
Examiner, Art Unit 2192